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(71)Applicant : DELAWARE CAPITAL FORMATION  
INC

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(72)Inventor : VINTHER GORDON A  
JOHNSTON CHARLES J  
CHABINEAU SCOTT D

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## (54) SPRING PROBE, SPRING PROBE ASSEMBLY, AND THEIR ASSEMBLING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a shorter external spring probe by preventing reduction of a spring operation life and compliance of the probe.

SOLUTION: This probe 10 has a plunger 12, a barrel 18, and a spring 16. The barrel 18 has an opening end 20. A contact tip 22 is extended from the end of the barrel on the opposite side of the opening end 20 of the barrel 18. A flange 24 generally expands in a position near the contact tip 22, from the barrel 18 to the radial outside. The plunger 12 has a contact tip 26. The flange 28 generally expands from the bottom of the contact tip 26 to the radial outside. A diameter 30 of the outer surface of the flange 28 formed on the plunger 12 is as long as or same extend as a diameter 32 of the outer surface of the flange formed on the barrel 18. A stem 34 is extended in the plunger 12 axially in the opposite direction to the contact tip of the plunger. An expanded cylindrical surface 36 is formed at the end of the stem 34, and a support portion 36 is formed.

